

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

DATE:

VESSEL:

PROJECT(S):

From: **29 Aug 2018**

to: **9 SEP 2018**

F/V FROSTI

CBS MEA

Fisheries and Oceans Canada

Captain: Dan Mose (leg 2) / First Officer: Say Anderson (leg 2) /
Second Officer: John Roach (leg 1) Third Officer: Dan Mose (leg 1)
Fishing Master: _____

Mission Participants / Agencies: DFO (Freshwater Institute + IOS); Université Laval;
Sachs Harbour HTC; Paulatuk HTC

Scientific Personnel: Chief Scientist: Andrew Majewski

Name	Watch	Cabin	Name	Watch	Cabin
<u>Valérie Cypriot (Benthos)</u>	_____	_____	_____	_____	_____
<u>Ashley Ehrman (Box Core)</u>	_____	_____	_____	_____	_____
<u>Krystal Woodard (Fish)</u>	_____	_____	_____	_____	_____
<u>Amanda Timmerman (Zooplankton)</u>	_____	_____	_____	_____	_____
<u>Jane Firt (Oceanography)</u>	_____	_____	_____	_____	_____
<u>Rachel Husherr (Primary Productivity)</u>	_____	_____	_____	_____	_____
<u>Kyle Wolki (Sachs Harbour HTC)</u>	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Second leg of Mission: Chief Scientist: Ashley Ehrman

Name	Watch	Cabin	Name	Watch	Cabin
<u>Valérie Cypriot (Benthos)</u>	_____	_____	_____	_____	_____
<u>Krystal Woodard (Fish)</u>	_____	_____	_____	_____	_____
<u>Christie Morrison (Box Core)</u>	_____	_____	_____	_____	_____
<u>Alexis Burt (Zooplankton)</u>	_____	_____	_____	_____	_____
<u>Glenn Cooper (Oceanography)</u>	_____	_____	_____	_____	_____
<u>Rachel Husherr (Primary Productivity)</u>	_____	_____	_____	_____	_____
<u>Joe Ilisiak (Paulatuk HTC)</u>	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Data logging computer: Lenovo TP2017-03-Cod.

Data acquisition program: SeaSave
CTD deck unit make: SeaBird model: SBE11 serial number: 0500

Primary CTD

Make: SeaBird model: SBE9 plus serial number: 09P78853-1189
Primary temperature serial number: 03-5830
Primary conductivity serial number: 04-4327
Secondary temperature serial number: 03-5831
Secondary conductivity serial number: 04-4339
Transmissometer: _____ Model: X-miss s/n: 1050
Fluorometer: Model Sea point SCF Cable gain: 30x s/n: 2859 ☒ P, S or NO pump?
Oxygen sensor: SeaBird Model: SBE4 s/n: 637 ☒ P, S or NO pump?
PAR sensor: _____ Model: QSP s/n: 70501
Other sensors: Benthos Altimeter s/n: 1161 ☐ P, S or NO pump?
Other sensors: _____ s/n: _____ ☐ P, S or NO pump?
Other sensors: _____ s/n: _____ ☐ P, S or NO pump?
Other sensors: _____ s/n: _____ ☐ P, S or NO pump?

Secondary CTD

Make: RBR model: Concerto serial number: 65572
Primary temperature serial number: _____
Primary conductivity serial number: _____
Secondary temperature serial number: _____

29 Aug 2018

- Snowy and cold at CFB-04
- wind NW 8 kn.
- ice $\leq 1/10$, but near a tongue of ice protruding from the ice pack.

DAILY SCIENCE LOG

Month			Year			Ship				Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
29	KUG-04	MPS	297	BE	13:29	70 58.81	134 48.30	348		AE.	Tap Log: Time was not correct
				BO	13:37	70 58.81	134 48.31	348			Not recorded in tap log.
				EN	13:46	70 58.80	134 48.45	350			
29	KUG-04	ROS	298	BE	13:57	70 58.73	134 48.41	347		GC	Not recorded in tap log
				BO	14:09	70 58.72	134 48.47		334		
				EN	14:29	70 58.73	134 48.55				
29	KUG-04	BON	299	BE	14:38	70 58.78	134 48.59	352	228.	AE.	
				EN	14:59	70 59.48	134 48.98				
29	KUG-04	BOX	300	BE	15:08	70 59.61	134 49.19	386		AE.	Slightly off station to avoid haul
				BO	15:11	70 59.61	134 49.20	387	387		
				EN	15:15	70 59.62	134 49.21	387			
29	KUG-04	BOX	301	BE	15:21	70 59.60	134 49.19	386		AE	" "
				BO	15:25	70 59.59	134 49.17	385			
				EN	15:29	70 59.59	134 49.15	385.			
29	Kug-04	ROS	302	BE	15:49	70 58.90	134 48.82	359		GC	Sample 352-359.
				BO	15:54	70 58.89	134 48.83		20		
				EN	15:57	70 58.81	134 48.80				
29	Kug-04	W2A	303	BE	16:12	70 58.74	134 48.96	354		KDU	
				BO	16:23	70 59.09	134 47.10	349			

Event Type:
 BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obi/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:
 BE = Beginning Time
 BO = Arrive on Bottom Time
 UP = Start up Time
 EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Amn

30 Aug 2018

- Fkn-05 sampled en route to Paulatuk
- wind SW 5-8 kn
- sunny!

DAILY SCIENCE LOG

Month			August			Year		2018		Ship		FROSTI		Cruise ID		CBS M		Page											
Day	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials																			
29	KUG-04	303	W2A	EN	16:43	71 00.00	134 45.20	360																					
30	PAL-01B	304	MPS	BE	1:37	71 00.93	131 04.82	57		AE.																			
				BO	1:39	71 00.95	131 04.76																						
				EN	1:42	71 00.95	131 04.59	56																					
30	DAL-01B	305	CTD	BE	2:07	71 01.60	131 03.30	56		AE.																			
				BO	2:09	71 01.01	131 03.21	56																					
				EN	2:11	71 01.01	131 03.14																						
30	ICE-03	306	ROS	BE	4:13	70 59.14	130 12.83	43		AE.																			
				BO	4:19	70 59.15	130 12.82		33																				
				EN	4:24	70 59.15	130 12.77																						
30	ICE-03	307	MPS	BE	4:53	70 59.07	130 10.73	44		AE.																			
				BO	4:56	70 59.06	130 10.60		43																				
				EN	4:59	70 59.06	130 10.50																						
30	FWN-05	308	ROS	BE	18:26	70 00.12	125 45.50	75		AE.																			
				BO	18:35	70 00.19	125 45.37		62																				
				EN	18:44	70 00.29	125 45.25																						
30	FWN-05	309	MPS	BE	18:58	69 59.86	125 46.77	77		AE.																			
				BO	19:00	69 59.89	125 46.73		68.8																				
				EN	19:04	69 59.94	125 46.68	77																					
Event Type:										Time Code:										Transmissometer to be cleaned before each cast, do not use Ammonia									
BOT = Bottle cast, no CTD										BE = Beginning Time										Notes:									
CTD = CTD without Rosette										BO = Arrive on Bottom Tim																			
ROS = Rosette plus CTD										UP = Start up Time																			
W2A = Western Trawl										EN = End Time																			
BBT = Benthic Beam Trawl																													
BON = Bongo (note Hor/Obl/Ver)																													
MPS = Multi-net																													
MWT = Midwater trawl																													
BOX = Box Core																													

31 Aug

- 20-30 kn NW, gusting to 25-30 kn winds; snow @ BPT-01.

- no MPS @ BPT-01 due to high wind.

- N.B.: "BPT-016" was listed as a target station in the cruise manual, but BPT station coordinates and depths were incorrect, based on coordinates from 2013, 2014. Chose to sample BPT-01 from previous years.

- wind settled to ~20 kn @ BPT-03.

Month			August			Year		2018		Ship			FROST			Cruise ID		CBS 1	
Day	Station	Event	Event	Event	Time	Time	Latitude (N)	Longitude (W)	Bottom	Max	Logger's								
(UTC)	Name	Type	Number	Code	(UTC)		DD MM.MM...	DDD MM.MM...	Depth	Depth	initials								
30	FKN-05	BON	310	BE	19:15	19:32	69 59.96	125 46.77	77	56	AE.					2 cycles (55.9 + 56.4 m)			
				EN.	19:32		69 59.37	125 47.13	76										
30	FKN-05	BOX	311	BE	19:48	19:48	70 00.00	125 46.54	77		AE.								
				BO	19:48		70 00.01	125 46.54		77									
				EN	19:49		70 00.01	125 46.52	78										
30	FKN-05	BOX	312	BE	19:55	19:55	70 00.06	125 46.38	77		AE.								
				BO	19:56		70 00.07	125 46.39		77									
				EN	19:57		70 00.08	125 46.35	77										
30	FKN-05	BBT	313	BE	20:06	20:06	70 00.20	125 46.20	76		KOU								
				BO	20:14		69 59 45	125 46 19	76										
				EN	20:24		69 59 62	125 46 42	75										
30	FKN-05	W2A	314	BE	20:42	20:42	69 59.47	125 46.64	75		AE					Door drop (BE) recording was 1-1			
				BO	20:44		69 59.58	125 46.45	74							Screen cap D20180830-T205			
				EN	21:05		70 00.68	125 45.40	70										
31	BPT-01	POS	315	BE	18:04	18:04	69 41.93	123 46.04	76		GC					Sample #: 375-384. Nidul			
				BO	18:10		69 41.87	123 45.84								on retrieval. Not useable			
				EN	18:19		69 41.77	123 45.41											
31	BPT-01	BON	316	BE	18:31	18:31	69 42.00	123 45.90	73		AE					Tow shortened due to high			
				EN	18:41		69 42.33	123 45.73	470d										

Transmissometer to be cleaned before each cast, do not use Annu-

Notes:

Time Code:

BE = Beginning Time

BO = Arrive on Bottom Time

UP = Start up Time

EN = End Time

BBT = Benthic Beam Trawl

BON = Bongo (note Hor/Obl/Ver)

MPS = Multi-net

MWT = Midwater trawl

BOX = Box Core

BOT = Bottle cast, no CTD

CTD = CTD without Rosette

ROS = Rosette plus CTD

W2A = Western Trawl

W2A = Western Trawl

DAILY SCIENCE LOG

Month			August		Year		2018		Ship		FROST		Cruise ID		CBS	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N)		Longitude (W)	Bottom Depth	Max Depth	Logger's initials					
						DD MM.MM...	DDD MM.MM...									
31	BPT-01	W2A	317	BE	19:20	69° 42.01	123° 47.71				AE.			Screen cap: 20180831-T192		
				BO	19:27	69 41.96	123 46.67		70					Failed tow → hauled back a		
				EN	19:29	69 41.92	123 46.44							↳ Redeployed.		
31	BPT-01	W2A	318	BE	19:52	69° 41.87	123° 45.52		75					Non-standard, shortened		
				BO	19:57	69° 41.94	123° 43.30		74		VC			uneven bottom.		
				EN	20:10	69° 42.19	123° 48.19		30							
31	BPT-03	BON	319	BE	21:56	69 41.95	123 24.94		129	118.6	AE			Late entry in taplog. Time here		
				EN.	22:13	69 42.47	123 24.85		131							
31	BPT-03	MPS	320	BE	22:31	69 41.95	123 26.39		125		AE.					
				BO	22:35	69 41.89	123 26.29									
				EN	22:39	69 41.80	123 26.17									
31	BPT-03	ROS	321	BE	22:57	69 41.94	123 26.32		126		GC.			Viskin #9 replaced Sample #1 BBS		
				BO	23:03	69 41.82	123 26.15			117						
				EN.	23:17	69° 41.57	123° 25.78									
31	BPT-03	BOX	322	BE	23:28	69 41.34	123 25.47		114		AE.					
				BO	23:29	69 41.32	123 25.44		114	114						
				EN	23:31	69 41.30	123 25.41		114							
31	BPT-03	BOX	323	BE	23:37	69 41.19	123 25.26		115		AE.					
				BO	23:38	69 41.17	123 25.24		115							

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 W2A = Western Trawl
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Notes:
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02 Sept 2018

FKN-01 - cold. wind NW 5-8 kn

FKN-02 - wind picked up to NW 15 kn.

DAILY SCIENCE LOG

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Month			August / SEPT		Year		2018		Ship		FROST		Cruise ID		CBS		Comments	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N)	DD MM.MM...	Longitude (W)	DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials						
31	BPT-03	BOX	323	EN	23:39	69 41.15	123 25.21											
31	BPT-03	BBT	324	BE	23:55	69 41.98	123 25.00			127		AE						
				BO	00:07	69 41.92	123 26.32			125								
				EN	00:17	69 41.89	123 27.45			126								
01	BPT-03	W2A	325	BE	00:33	69 41.87	123 27.93			119		AE				Screen cap. D20180901-T0005		
				BO	00:39	69 41.91	123 26.61			125								
				EN	00:59	69 41.95	123 23.21			133.								
02	FKN-01	ROS	326	BE	18:06	70 00.05	126 49.001			52		GC				Pumps not on. So rede		
				BO	18	70 59.90	126 48.67.				46.					Sample # 397-398 but not		
				EN	18	70	126											
02	FKN-01	ROS	327	BE	18:18	69 59.86	126 48.62			54.		GC				Sample # 399-406 - Redo.		
				BO	18:21	69 59.80	126 48.51				46							
				EN	18:27	69 59.72	126 48.30											
02	FKN-01	BON	328	BE	18:35	69 59.78	126 48.03			60	29	AE				Two tow-403. Depths 29		
				EN	18:53	70 00.37	126 48.29			63								
02	FKN-01	MPS	329	BE	19:03	70 00.16	126 49.13			52		AE				42-30, 30-20, 20-10, 10-0		
				BO	19:05	70 00.13	126 49.06			52.	42							
				EN	19:08	70 00.09	126 48.96			52.								

Event Type:		BBT = Benthic Beam Trawl		Time Code:		Transmissometer to be cleaned before each cast, do not use Amn	
BOT = Bottle cast, no CTD		BON = Bongo (note Hor/Obi/Ver)		BE = Beginning Time			
CTD = CTD without Rosette		MPS = Multi-net		BO = Arrive on Bottom Tim			
ROS = Rosette plus CTD		MWT = Midwater trawl		UP = Start up Time			
W2A = Western Trawl		BOX = Box Core		EN = End Time			
				Notes:			

DAILY SCIENCE LOG

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Month			Year			Ship				Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MMM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
2	FKN-01	BOX	330	BE	19:22	70 00.21	126 49.24	51		AE.	Bad core. Redeployed
				BO	19:22	70 00.21	126 49.23		51		
				EN	19:23	70 00.21	126 49.21	51			
2	FKN-01	BOX	331	BE	19:25	70 00.21	126 4.15	52			Bad core. Redeployed.
				BO	19:25	70 00.19	126 49.14		52	AE.	
				EN	19:25	70 00.19	126 49.12.	52.			
2	FKN-01	BOX	332	BE	19:27	70 00.8	126 49.07	52			Slumped. Moving position
				BO	19:28	70 00.17	126 49.05	52.	52	AE	
				EN	19:28	70 00.17	126 49.03	52.			
2	FKN-01	BOX	333	BE	19:35	70 00.26	126 48.64	58			
				BO	19:36	70 00.26	126 48.62		58	AE	
				EN	19:36	70 00.26	126 48.60	59			
2	FKN-01	BBT	334	BE	19:46	70 00.23	126 49.26	50		KDW	
				BO	19:52	70 00.00	126 48.91	51			
				EN	20:02	69 59.63	126 48.32	53			
2	FKN-01	W2A	335	BE	20:22	69 59.69	126 48.49	51		AE	Screen cap: D20180902-T200
				BO	20:23	69 59.44	126 48.11	52.			Trawl ended early (12 min)
				EN	20:37	69 58.62	126 46.77	51			* Toplog EN entry a few min ↳ fixed Oct. 06 Sep. 2018

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Time Code:

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Notes:

Transmissometer to be cleaned before each cast, do not use Am

DAILY SCIENCE LOG

Month			SEPT.		Year		2018		Ship		FROST1		Cruise ID		CBS A1	
Day	Station	Event	Event	Event	Time	Time	Latitude (N)	Longitude (W)	Bottom	Max	Logger's	Comments				
(UTC)	Name	Type	Number	Code	(UTC)	DD MM.MM...	DDD MM.MM...	Depth	Depth	initials						
2	FKN-01	W2A	336	BE	21:02	69 58.26	126 46.02	54			AE.	Mud bomb. Ended early.				
				BO	21:07	69 58.47	126 46.37	57								
				EN	21:09	69 58.56	126 46.49	57								
2	FKN-01	W2A	337	BE	21:35	69 58.97	126 47.00	60			KDW					
				BO	21:40	69 59.19	126 47.47	57								
				EN	22:00	69 59.20	126 48.26	50								
2	FKN-02	ROS	338	BE	22:57	69 59.12	126 39.50	163			RH	Sample # 407 to # 418				
				BO	23:05	69 59.66	126 39.43	154								
				EN	23:17	69 59.24	126 39.09									
2	FKN-02	MPS	339	BE	23:34	69 59.95	126 40.43	154			AE.	Targets: 144-100, 100-50, 50-				
				BO	23:40	69 59.83	126 40.14	156		144						
				EN	23:46	69 59.72	126 39.60	164								
2	FKN-02	BON	340	BE	23:57	69 59.45	126 39.04	165		145	AE.					
				EN	00:17	69 59.60	126 40.14	153								
3	FKN-03	BOX	341	BE	00:36	70 00.00	126 40.25	157			AE.					
				BO	00:37	69 59.98	126 40.19	158		158						
				EN	00:39	69 59.95	126 40.15	158								
3	FKN-02	BOX	342	BE	00:45	69 59.78	126 39.97	159			AE.					
				BO	00:46	69 59.73	126 39.92	159		159						

Event Type:
 BOT = Bottle cast, no CTD
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Notes:

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3- Sept 2018

- FKN-03: overcast, wind 15-18 kn NW
- FKN-04: a bit of sun! wind died down to ~8 kn W

DAILY SCIENCE LOG

Month			Year		Ship			Cruise ID		Comments
SEPT			2018		FROST			CBS		
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials
3	FKN-02	BOX	342	EN	00:48	69 59.67	126 39.84	159		
3	FKN-02	BBT	343	BE	00:56	69 59.50	126 39.40	163	AE.	
				BO	01:06	69 59.74	126 39.79	162		
				EN	01:16	69 59.97	126 40.14	159		
3	FKN-02	WZA	344	BE	01:35	69 59.62	126 39.98	156		AE.
				BO	01:41					
				EN	02:01	70 00.65	126 41.31	147		
3	FKN-03	ROS	345	BE	13:28	70 00.27	126 15.30	213		GE.
				BO	13:35	70 00.15	126 15.30		200	
				EN	13:50	70 00.01	126 15.60			
3	FKN-03	MPS	346	BE	14:02	70 00.26	126 14.93	213		AE.
				BO	14:08	70 00.27	126 15.06	213	209	
				EN	14:16	70 00.22	126 15.12	212		
3	FKN-03	ROS	346	BE	14:58	70 00.17	126 15.06	212		GE
				BO	15:01	70 00.13	126 15.05		5	
				EN	15:02	70 00.12	126 15.05			
3	FKN-03	BON	347	BE	15:10	70 00.07	126 15.11	211		AE.
				EN	15:31	70 00.43	126 17.42	208	203.8	

Event Type:
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Transmissometer to be cleaned before each cast, do not use Annin

DAILY SCIENCE LOG

19:05

19:05

Page

Month			Year			Ship			Cruise ID			Comments
SEPT.			2018			FROSTI			CBS ME			
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials		
3	FKN-03	BBT	348	BE	15:48	69 59.83	126 15.02	210		AE.		
				BO	16:02	70 00.33	126 15.52	212				
				EN	16:13	70 00.68	126 15.91	214				
3	FKN-03	BOX	349	BE	16:46	70 00.01	126 15.08	210		AE.		*Tap log time 1 min late for
				BO	16:48	70 00.01	126 15.10	210	210			
				EN	16:50	70 00.00	126 15.09	210				
3	FKN-03	BOX	350	BE	16:56	69 59.92	126 15.00	211		AE		
				BO	16:58	69 59.92	126 14.96	211	211			
				EN	17:01	69 59.91	126 14.93	210				
3	FKN-03	W2A	351	BE	17:15	69 59.76	126 15.03	209		AE.		Screen cap D20180903-T172144
				BO	17:22	70 00.27	126 15.36	212				
				EN	17:42	70 01.00	126 16.14					
3	FKN-04	ROS	352	BE	19:16	70 00.50	125 57.35	134		BC.		Sample 433-444
				BO	19:24	70 00.54	125 57.01		121			
				EN	19:35	70 00.71	125 56.58					
3	FKN-04	MPS	353	BE	19:50	70 00.33	125 58.41	163		AE.		Targets 151-100, 100-50, 50
				BO	19:55	70 00.40	125 58.31	159	151			Wire had ~20° angle.
				EN	20:01	70 00.45	125 58.13	154				

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl

BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Time
UP = Start up Time
EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia

DAILY SCIENCE LOG

Month			Year		Ship			Cruise ID		Comments	
Sept			2018		FROST			CBS			
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	
3	FKN-04	BON	354	BE	20:10	70 00.51	125 58.12	154	134	AE.	1 tow-yo cycle.
				EN	20:29	70 00.02	125 59.35	184			
3	FKN-04	BOX	355	BE	20:39	70 00.15	125 57.73	143		AE	
				BO	20:41	70 00.18	125 57.70	143	143		
				EN	20:43	70 00.19	125 57.68	142			
3	FKN-04	BOX	356	BE	20:48	70 00.24	125 57.53	137		AE.	
				BO	20:56	70 00.25	125 57.50	135	135		
				EN	20:51	70 00.27	125 57.46	134			
3	FKN-04	BBT	357	BE	20:58	70 00.28	125 58.00	148		AE.	
				BO	21:08	69 59.91	125 57.73	154			
				EN	21:18	69 59.57	125 57.47	154			
3	FKN-04	W2A	358	BE	21:36	69 59.36	125 57.13	150		AE.	Screen cap D20180903-TA2081
				BO	21:42	69 59.87	125 57.65	151			
				EN	22:02	70 01.13	125 58.23	162			
4	FKN-HC1	CTD	359	BE	14:01	70 00.08	126 40.34	157		GC	Surface pressure -0.05. Hydro net
				BO	14:07	69 59.98	126 40.35		149		
				EN	14:10	69 59.93	126 40.33				
4	FKN-HC1	TKR	360	BE	14:38	70 00.09	126 39.37	171	70.5	AE.	Only deployed vacuum net. Tarp
				BO	14:46						* Bp not in topdog notes

Event Type:
BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obi/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:
BE = Beginning Time
BO = Arrive on Bottom Time
UP = Start up Time
EN = End Time

Notes:
Transmissometer to be cleaned before each cast, do not use Ammonia

DAILY SCIENCE LOG

MonthSeptemberYear2018ShipFASTI

Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
4	FKN-HC1	TKR	360	EN	14:57	70 00.06	126 34.88	189			*EN not in tapelog (somp)
4	FKN-HC1	MWT	361	BE	15:32	70 00.03	126 36.29	184		AE.	Target 125m.
				BO	15:42	70 00.03	126 37.94				Screen cap D20180904-T1412
				UP	16:02	70 00.06	126 40.71	150			
				EN	16:05	69 59.98	126 40.80	147			Tapeleg didn't record coordinates
4	FKN-HC2	CTD	362	BE	1925	70 00.37	125 57.04	100		GC.	RBR used, because son state
				BO	1933	70 00.43	125 50.80		90		
				EN	1936	70 00.46	125 50.69				
4	FKN-HC2	TKR	363	BE	1954	70 00.17	125 52.23	109	93	AE.	Targets 60 + 40 m.
				BO	2002	70 00.68	125 51.79	107			
				EN	2008	70 01.51	125 51.06	110	65		
4	FKN-HC2	MWT	364	BE	2047	70 01.74	125 50.48	111	65	AE.	Target 65m
				BO	2052	70 01.50	125 50.73	110			Screen cap D20180904-T2038
				UP	2112	70 00.57	125 51.44	104			
				EN	2114	70 00.57	125 51.40	104			
4	FKN-06	CTD	365	BE	2340	70 00.25	125 28.97	57		GC	Rosette CTD used.
				BO	2344	70 00.25	125 23.71		40		
				EN	2346	70 00.25	125 23.63				

Event Type:
BOT = Bottle cast, no CTD
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ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:
BE = Beginning Time
BO = Arrive on Bottom Time
UP = Start up Time
EN = End Time

Notes:
Transmissometer to be cleaned before each cast, do not use Ammonia

Transmissometer to be cleaned before each cast, do not use Ammonia

4 Sept 2018

- hydroacoustics transect for FKN
- wind was NW 15-25 kn all day.
- bowheads observed near FKN-01

- FKN-06 re-sample in ice-free conditions.
Tucker and midwater trawl deployed
for hydroacoustics verification.

- FBS = Franklin Bay Shoreline,
new hydroacoustics transect in a grid pattern
along eastern shore of Franklin Bay,
conducted immediately after sampling FKN-06
while en route to beginning of FEX transect.

- FKN-HC-Start: 70 00.11, 126 51.54, 12:52 UTC
FKN-HC-End: 70 00.02, 125 17.26, 23:03 UTC

- FBS-HC-Start: 69 59.72, 125 23.58, 2:52 UTC
FBS-HC-End: 69 40.02, 125 47.30, 6:10 UTC.

DAILY SCIENCE LOG

Page

Month			Year		Ship			Cruise ID		Comments
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N)	Longitude (W)	Bottom Depth	Max Depth	
						DD MM.MM...	DDD MM.MM...			
5	FKN-06	MPS	366	BE	00:02	70 00.24	125 24.33	51		Targets 40-30, 30-20, 20-10, 10
				BO	00:04	70 00.25	125 24.25	51	43	
				EN	00:07	70 00.27	125 24.09	51		
5	FKN-06	TKR	367	BE	1:06	70 59.76	125 26.99	54		Targets: 500 mesh + 1000 mesh
				BO	1:12	70 00.11	125 25.53	54		
				EN	1:23	70 00.89	125 24.46	67		
5	FKN-06	INWAT	368	BE	1:51	70 00.94	125 23.23	57		
				BO	1:55	70 00.80	125 33.76	57		
			UP	EX	2:05	70 00.49	125 24.72	55		EN: 2:07, 70 00.49, 125 24
5	FKN-07	ROS	369	BE	14:19	69 37.81	125 56.95	83		Sample 445-455
				BO	14:23	69 37.76	125 57.25		78	32m mixed layer.
				EN	14:33	69 37.67	125 57.88			
5	FKN-07	MPS	370	BE	14:47	69 37.87	125 56.67	83	73.1	Targets: 73-50, 50-25, 25
				BO	14:51	69 37.83	125 56.90			
				EN	14:56	69 37.80	125 57.21	85		
5	FKN-07	BON	371	BE	15:05	69 37.90	125 57.83	89	82	Bottom depths: 82, 82 m
				EN	15:25	69 38.57	125 58.56	97		
5	FKN-07	BOX	372	BE	15:43	69 37.92	125 56.51	82		
				BO	15:44	69 37.90	125 56.60		83	

Event Type:
 BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 W2A = Western Trawl

BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Obl/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
 BOX = Box Core

Time Code:
 BE = Beginning Time
 BO = Arrive on Bottom Time
 UP = Start up Time
 EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Anti

5 Sept 2018

- wind NW 5 kn @ FKN-07; sunny + beautiful! But still cold.
- FKN-07 sampled during FEX hydroacoustics transect.

FEX-HC-Start: 69 23.56, 125 47.40, 12:07 UTC - 5 Sep

FEX-HC-~~End~~ Pause: 70 12.73, 126 20.95, 01:07 UTC 6 Sep - overnight break

FEX-HC-Resume: 70 12.73, 126 20.95, 12:51 UTC - 6 Sep - resumed in morning

FEX-HC-End:

DAILY SCIENCE LOG

Month			SEPT		Year		2018		Ship		FROST		Cruise ID		CAS M	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N)		Longitude (W)		Bottom Depth	Max Depth	Logger's initials				Comments
						DD MM.MM...	DDD MM.MM...									
5	FKN-07	BOX	372	EN	15:45	69 37.89		125 56.73		83						
5	FKN-07	BOX	373	BE	15:50	69 37.85		125 57.21		86		AE		discarded		
				BO	15:52	69 37.84		125 57.29		86						
				EN	15:52	69 37.84		125 57.37		86						
5	FKN-07	BBT	374	BE	16:10	69 37.11		125 57.67		87		KW				
				BO	16:17	69 37.35		125 57.30		86						
				EN	16:27	69 37.67		125 56.75		83						
5	FKN-07	W2A	375	BE	16:50	69 38.79		125 55.71		84		AE		Screen cap D20180905-7170		
				BO	16:58	69 38.37		125 56.31		86						
				EN	17:18	69 37.17		125 57.30		85						
5	FEX-HC1	CTD	376	BE	20:13	69 55.37		125 08.13		174		GC		Rosette CTD used for cast		
				BO	20:20	69 55.39		125 07.72			166					
				EN	20:24	69 55.39		125 07.62								
5	FEX-HC1	TKR	377	BE	20:43	69 55.31		126 06.74		170		AE		Targets: 1) 100, 2) 35, 3) 30		
				BO	20:52	69 55.23		126 07.65		171	160					
				EN	21:10	69 55.11		126 09.08		173						
5	FEX-HC1	MWT	378	BE	21:36	69 55.27		126 06.29		169		KW		Target = 25m		
				BO	21:39	69 55.24		126 06.63		169						
				EN	21:45	69 55.20		126 07.55		170						

Event Type:
BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:
BE = Beginning Time
BO = Arrive on Bottom Time
UP = Start up Time
EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Ann

6 Sept 2018

- calm, variable light wind from SW.
- foggy
- ice stopped our progression down the FEX transect.
- moved location of AMG-06 ~ 2nm South of the originally proposed location. New station coordinates:
70 32.64, 126 34.48, 327m

DAILY SCIENCE LOG

Month			SEPT		Year		2018		Ship		FROSTI		Cruise ID	Comments
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials				
5	FEX-HC2	MWT	379	BE	2328	70 03.42	126 14.85	231	30	AE	Non-standard tow (qual. truth). Lowered to 11.8 m, retrieved to capture/verify Hydroacoustics signals			
				BO	2331	70 03.21	126 14.65	230	21.5					
				UP	2336	70 02.90	126 14.36	229						
				EN	2337	70 02.88	126 14.33	229						
6	FEX-HC3	CTD	380	BE	1350	70 17.81	126 22.98	243		GC	0.05 m air pressure at stat			
				BO	1356	70 17.78	126 22.72		234		33.1 = 172 m Rosette CTD			
				EN	1401	70 17.76	126 22.61				cast.			
6	FEX-HC3	TKR	381	BE	1422	70 17.56	126 22.22	242		AE	Targets: 1) 150, 2) 55-40 (500)			
				BO	1433	70 17.61	126 23.34	241			3) 55-40 m (1000, 1500)			
				EN	1456	70 17.36	126 25.73	241						
6	FEX-HC3	MWT	382	BE	1538	70 17.25	126 22.13	239		KDW	Target = 60 m			
				BO	1542	70 17.00	126 22.33	237						
				EN	1547	70 16.75	126 22.39	238						
6	AMG-06	ROS	383	BE	1907	70 32.77	126 34.75	329		GC	Sample = 156-467			
				BO	1916	70 32.85	126 34.84		321					
				EN	1931	70 32.91	126 34.77							
6	AMG-06	MPS	384	BE	1944	70 32.61	126 34.68	327		AE	Targets: 317-300, 300-200, 200-100			
				BO	1950	70 32.52	126 34.78	327	317					
				EN	1958	70 32.57	126 34.83	326						

Event Type:
BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
WZA = Western Trawl

BBT = Benthic Beam Trawl
BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:
BE = Beginning Time
BO = Arrive on Bottom Time
UP = Start up Time
EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Ann

DAILY SCIENCE LOG

Month			Year			Ship				Cruise ID	
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
6	AMG-06	ROS	385	BE	20:28	70 32.59	126 35.01	327		GC	Sample# 468-472.
				BO	20:30	70 32.59	126 35.06		22		
				EN	20:34	70 35.59	126 35.09				
6	AMG-06	BON	386	BE	20:46	70 32.62	126 35.35	328		AE-	
				EN	21:06	70 33.34	126 34.54	332	197.0		
6	AMG-06	BOX	387	BE	21:22	70 32.83	126 35.02	329		AE-	
				BO	21:26	70 32.82	126 35.15	329.			
				EN	21:29	70 32.80	126 35.20	329			
6	AMG-06	BOX	388	BE	21:39	70 32.83	126 35.48	329		AE.	
				BO	21:42	70 32.82	126 35.49	329			
				EN	21:45	70 32.81	126 35.50	330			
6	AMG-06	BBT	389	BE	22:01	70 32.45	126 38.14	331		VC	
				BO	22:14	70 32.15	126 36.80	327			
				EN	22:24	70 31.98	126 35.83	324			
6	AMG-06	W2A	390	BE	22:46	70 31.64	126 34.79	323.		AE.	Screen cap D20180906.T2254
				BO	22:57	70 31.98	126 37.41	327			
				EN	23:17	70 32.27	126 40.60	327			

Event Type:
 BBT = Benthic Beam Trawl
 BON = Bongo (note Hor/Ob/Ver)
 MPS = Multi-net
 MWT = Midwater trawl
 BOX = Box Core
 BOT = Bottle cast, no CTD
 CTD = CTD without Rosette
 ROS = Rosette plus CTD
 W2A = Western Trawl

Time Code:
 BE = Beginning Time
 BO = Arrive on Bottom Time
 UP = Start up Time
 EN = End Time

Notes:
 Transmissometer to be cleaned before each cast, do not use Ammonia

DAILY SCIENCE LOG

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Page

Month		Year		Ship			Cruise ID		Comments	
September		2018		Frosta			CBS 1			
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials
7	AMG-05	ROS	391	BE	13:19	70 25.43	126 28.75	281		AE
				BO	13:28	70 25.39	126 28.60		271	
				EN	13:44	70 25.14	126 28.22			
7	AMG-05	MPS	392	BE	13:53	70 25.16	126 28.27	279		AE
				BO	14:00	70 25.12	126 28.16	279	269	
				EN	14:08	70 25.06	126 28.03	278		
7	AMG-05	ROS	393	BE	14:13	70 25.31	126 28.83	281		AE
				BO	14:45	70 25.28	126 28.81		10	
				EN	14:48	70 25.24	126 28.77			
7	AMG-05	BON	394	BE	14:57	70 25.33	126 28.55	279	117	AE
				EN	15:13	70 25.96	126 28.21			
7	AMG-05	BOX	395	BE	15:29	70 25.26	126 28.66	279		AE
				BO	15:32	70 25.23	126 28.64	281	281	
				EN	15:34	70 25.21	126 28.62	279		
7	AMG-05	BOX	396	BE	15:42	70 25.13	126 28.58	279		AE
				BO	15:44	70 25.10	126 28.57	278	278	
				EN	15:47	70 25.07	126 28.52	278		
7	AMG-05	BST	397	BE	15:56	70 25.07	126 28.43	279		VC
				BO	16:11	70 25.71	126 28.36	282		
	</									

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl

BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Time
UP = Start up Time
EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia

7 SEP 2018

-very cold. Wind NW 18 kn in the morning,
calming to ~10-15 kn in the evening

DAILY SCIENCE LOG

Month			SEPTEMBER.			Year			2018			Ship			FROST 1			Cruise ID			CBS MIA			Page		
Day	Station	Event	Event	Event	Time	Time	Latitude (N)	Longitude (W)	Bottom	Max	Logger's															
(UTC)	Name	Type	Number	Code	(UTC)		DD MM.MM...	DDD MM.MM...	Depth	Depth	initials															
7	AMG-05	BBT	397	EN	16:21	70 26.14	126 28.29	286																		
7	AMG-05	W2A	398	BE	16:45	70 25.91	126 27.10	282			AE.															
				BO	16:58	70 25.13	126 28.82	279	279																	
				EN	17:18	70 24.23	126 30.84	275																		
7	AMG-04	MPS	399	BE	19:44	70 19.19	126 25.09	249			GE															
				BO	19:49	70 19.15	126 24.96		243																	
				EN	19:55	70 19.10	126 24.80																			
7	AMG-04	Box	400	BE	20:08	70 19.10	126 23.99	249			AE.															
				BO	20:11	70 19.09	126 23.91	248	248																	
				EN	20:13	70 19.07	126 23.84	248																		
7	AMG-04	Box	401	BE	20:20	70 19.00	126 23.63	248			AE.															
				BO	20:22	70 18.98	126 23.57	248	248																	
				EN	20:25	70 18.96	126 23.50	249																		
7	AMG-04	Box	402	BE	20:36	70 18.86	126 25.15	247			AE.															
				BO	20:39	70 18.84	126 23.08	247	247																	
				EN	20:41	70 18.82	126 23.00	246																		
7	AMG-04	Box	403	BE	21:01	70 18.50	126 25.08	251			RH															
				BO	21:11	70 19.07	126 24.44		241																	
				EN	21:23	70 18.58	126 24.21																			

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Time
UP = Start up Time
EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia

8 8 Sep 2018

- BPT-05, wind W 20 kn.
- so cold, again!

DAILY SCIENCE LOG

Month		SEPTEMBER		Year		2018		Ship		FROST		Cruise ID		CBS 110		Page	
Day	Station	Event	Event	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time

7	AMG-04	BON	404	BE	21:32	70 19.03	126 23.90	248			
				EN	21:51	70 19.66	126 22.72	252	170.8	en	
7	AMG-04	ROS	405	BE	22:12	70 19.48	126 23.83	252		GC	
				BO	22:16	70 19.46	126 23.74		30		Chmax ~ 23 m. Sample 11. 81
				EN	22:21	70 19.43	126 23.58				
7	AMG-04	BBT	406	BE	22:38	70 18.80	126 26.21	249		AE	
				BO	22:50	70 19.32	126 25.98	252		VC	
				EN	23:00	70 19.73	126 25.73	252			
7	AMG-04	W2A	407	BE	23:21	70 19.60	126 24.98	252		AE	Screen cap D20180907-721M
				BO	23:31	70 18.88	126 25.13	248			
				EN	23:51	70 17.71	126 25.00	243			
8	BPT-05	ROS	408	BE	14:43	69° 42.00	123 11.39	40		GC	Sample 805-510.
				BO	14:47	69° 42.04	123 11.21		30		
				EN	14:52	69° 42.11	123 10.97				
8	BPT-05	MPS	409	BE	15:03	69 42.03	123 11.71	41		AE	Targets: 31-20, 20-10, 10-0
				BO	15:04	69 42.05	123 11.65		40		
				EN	15:08	69 42.08	123 11.53	40		AE	
8	BPT-05	BON	410	BE	15:17	69 42.21	123 11.51	40	31.35	AE	Bottoms: 24.1, 21.5, 31.35, 25.7
				EN	15:34	69 42.53	123 13.28	78			4 tow-40 cycles.

Event Type:

BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
W2A = Western Trawl

BBT = Benthic Beam Trawl

BON = Bongo (note Hor/Obl/Ver)
MPS = Multi-net
MWT = Midwater trawl
BOX = Box Core

Time Code:

BE = Beginning Time
BO = Arrive on Bottom Time
UP = Start up Time
EN = End Time

Notes:

Transmissometer to be cleaned before each cast, do not use Ammonia

DAILY SCIENCE LOG

Month SEPTEMBER				Year 2018		Ship FR6ST1		Cruise ID CBS 1			
Day (UTC)	Station Name	Event Type	Event Number	Time Code	Time (UTC)	Latitude (N) DD MM.MM...	Longitude (W) DDD MM.MM...	Bottom Depth	Max Depth	Logger's initials	Comments
8	BPT-05	BOX	411	BE	15:50	69 41.94	123 11.73	41		AE.	Poor Core.
				BO	15:50	69 41.94	123 11.72	42	42.		
				EN	15:51	69 41.95	123 11.70	41			
8	BPT-05	BOX	412	BE	15:58	69 42.03	123 11.46	39		AE.	Shovel didn't trigger. Reel
				BO	15:59	69 42.04	123 11.45	40	40		
				EN	15:59	69 42.05	123 11.43	39			
8	BPT-05	BOX	413	BE	16:00	69 42.06	123 11.39	39		AE.	
				BO	16:01	69 42.06	123 11.39	39	39		
				EN	16:01	69 42.07	123 11.37	39			
8	BPT-05	BOX	414	BE	16:08	69 42.16	123 11.13	35		AE.	
				BO	16:09	69 42.17	123 11.12	35	35		
				EN	16:09	69 42.17	123 11.01	35			
8	BPT-05	W2A	415	BE	16:28	69 42.07	123 11.34	38		✓	
				BO	16:31	69 42.32	123 11.35	40			
				EN	16:51	69 43.50	123 11.27	48			
9	BPT-03	BOX	416	BE				120			Missed time in.
				BO	13:23	69 41.87	123 27.90		120	AE.	Extra box for benthic pig
				EN	13:22	69 41.87	123 27.88	120			experiment + community

Event Type:		Time Code:		Notes:	
BOT = Bottle cast, no CTD	BBT = Benthic Beam Trawl	BE = Beginning Time	BO = Arrive on Bottom Time	Transmissometer to be cleaned before each cast, do not use Amn	
CTD = CTD without Rosette	BON = Bongo (note Hor/Obl/Ver)	BO = Arrive on Bottom Time	UP = Start up Time		
ROS = Rosette plus CTD	MPS = Multi-net	UP = Start up Time	EN = End Time		
W2A = Western Trawl	MWT = Midwater trawl				
	BOX = Box Core				

[illegible]